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REMARKS

In paragraph 3 of the office action, the Examiner objects to Claims 117, 119 and 121 for the user of the term "programmably" is grammatically an incorrect word. The Applicant disagrees. The term "programmably" is a well known and frequently used term used in patenting. In fact, the USPTO itself uses the term as an adverb in classification codes 180 and 204 for example. Code 204 title is "WITH DEVICE FOR PROGRAMMABLY OPERATING VEHICLE'S STEERABLE WHEELS". The Applicant respectfully submits the term is properly used with the claims and the claims are therefore allowable.

In paragraph 4, the Examiner rejects Claim 71 (and Claims 90 and 109) under 35 U.S.C. 112, second paragraph for "the workload" in line 2 having insufficient antecedent basis. The Applicant has amended Claim Claims 63, 66, 71, 82, 85, 90, 101, 104 and 109 to provide the proper antecedent basis. The applicant submits that amended Claims 71, 90 and 109 are in condition for allowance, which allowance is respectfully requested.

In paragraph 5 of the office action, the Examiner rejects Claims 59-61, 64-75, 77-80, 83-94, 96-99, 102-113, and 115 under 35 U.S.C. 103(a) as being unpatentable over Gulick (US 6,314,501) in view of Makhoulf (US 6,789,054).

In paragraph 6, the Examiner says that Gulick teaches: "A system for the collection and analysis of computer system capacity data in a partitioned computer system having a computer system first partition and a computer system second partition (Col 33, lines 55-59), the system comprising:

- a network (Col 33, lines 55-59);

- a partitioned computer system in communication with the network wherein the partitioned computer system

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includes instructions to execute a method comprising the steps of (Col 33, lines 55-59):

a) an analysis application running in a computer system second partition obtaining (throughput) information of a computer system first partition (obtaining the information by shared window, Col 2, lines 62-64, Col 3, lines 6-35, col 4 lines 40-42);

b) the analysis application obtaining resource utilization information of the computer system first partition (obtaining the information by shared window, Col 2, lines 62-64, Col 3, lines 6-35, col 4 lines 40-42 and resource balancing directives based on said first partition information col 3 lines 25-35, col 52, lines 3-45);" The applicant disagrees. The references cited of Gulich fail to disclose any "analysis application running in a computer system second partition" or any "analysis application running in a computer system second partition" obtaining either "throughput information" or "resource utilization information" of a first partition as shown in the claims. Gulich teaches a partitioned computer system having shared memory for communicating between partitions.

In paragraph 7, the Examiner says that Gulick fails to explicitly teach "the information including throughput information, c) the analysis application calculating a resource control parameter using the resource utilization information obtained and the throughput information obtained; however, Makhoulf teaches a visual graphic analysis application running in a networked and partitioned computer with resource monitoring control parameters based on system performance metrics such as throughput, resource utilization, etc for real-time systems (col 17, line 17, col 1 lines 36-46, col 46 lines 43-59, col 36 line 67, see claim 1)". The applicant disagrees. Makhoulf does not teach an "analysis application control parameter (running in a

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computer system second partition) using the resource utilization information obtained and the throughput information obtained (from the first partition);". The references cited of Makhoulf teach an object oriented program for modeling systems. The Examiner asserts that "Makhoulf teaches a visual/graphical 'real time' performance analysis application running in a networked and partitioned computer with resource monitoring control parameters based on system performance metrics such as throughput, resource utilization, etc for real-time systems". The applicant assumes that this is the Examiner's interpretation of the claim language. The applicant disagrees. The present invention as claimed is not limited to real-time systems but rather for providing a "resource control parameter indicating real time resource performance" of a first partition. The Citations of Gulich and Makhoulf alone or in combination do not teach "obtaining throughput information of a computer system first partition"; "an analysis application running in a computer system second partition obtaining throughput information of a computer system first partition"; the analysis application also "obtaining resource utilization information of the computer system first partition"; "the analysis application calculating a resource control parameter using the resource utilization information obtained and the throughput information obtained"; providing the resource control parameter to a user agent"; or "the resource control parameter indicating real time resource performance".

Makhoulf Col 17, line 17 mentions "partition" but the partition of Makhoulf refers to "independent, observable, controllable subsystems called Adaptive Loop Information Nets (ALI_Nets)." Which are the object oriented components used to model portions of a system being simulated. They are not well known Partitions of a computer system of the present invention and Gulich. Makhoulf Col 1 lines 36-46 discusses "Real-time constraints:" of "Real-time systems" not "indicating real time

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resource performance" as claimed. Makhlouf col 46 lines 43-59 discusses use of an "AMR Sensitivity Analysis Tool" to "compute the operational performance of alternate architecture models". This is a simulation tool operating on a simulation model of a system rather than "calculating a resource control parameter using the resource utilization information obtained and the throughput information obtained" as claimed. Makhlouf col 36 line 67 "Resources_Monitoring_Control_Parameters" are object oriented loop data structures for use by the Object oriented AMR simulation system. They are not "resource control parameter indicating real time resource performance" calculated by " using the resource utilization information obtained and the throughput information obtained" as shown in the claim. The Examiner has further failed to show "providing the resource control parameter to a user agent" or "providing the resource control parameter to a user agent, the resource control parameter indicating real time resource performance" Therefore, the applicant submits claim 59 is allowable, which allowance is respectfully requested.

The Examiner has failed to show any motivation within the cited art to combine Gulich and Makhlouf.

According to *Karsten Mfg Corp. V. Cleveland Gulf Co.*, 242 F.3d 1376, 1385, 58 U.S.P.Q.2d 1286, 1293 (Fed. Cir. 2001), "In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention:."

Also in *re C.R. Bard, Inc. V. M3 Sys., Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998).

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Furthermore, Gulich is directed to a shared memory computer system while Makhlouf is directed to an Object Oriented computer simulation system which is non-analogous art.

In re Clay, 966 F.2d 656, 658-59, 23 U.S.P.Q.2d 1058, 1060-61 (Fed. Cir. 1992) which requires "either 1. The art is from the same field as the invention or 2. The reference is reasonably pertinent to the problem solved by the invention".

According to *Smith v. Hayashi*, 209 U.S.P.Q. 754, 759 (Bd. Pat. App. & Int. 1980) The examiner must provide evidence to show that the prior art recognizes the equivalency.

Even if one were motivated to combine Gulich and Makhlouf, the result would teach away from the present invention. Such a combination would result in an Object Oriented program (Makhouf) for modeling the Gulich system. The applicant submits claim 59 is allowable, which allowance is respectfully requested.

In paragraph 9, the Examiner says that as to claim 61, Makhlouf teaches "the user agent displaying at a terminal, the resource control parameter wherein the resource control parameter comprises the throughput information as a function of resource utilization.". The applicant disagrees. The citation is silent on any display of "throughput information as a function of resource utilization" as shown in the claims. The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 61 is allowable, which allowance is respectfully requested.

In paragraph 10, the Examiner says that as to claim 64, Makhlouf teaches "the user agent displaying as a graph at a terminal the resource control parameter, the display comprising effective utilization versus resource utilization wherein effective utilization derived in the calculating step comprises change in

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throughput divided by change in resource utilization." The applicant disagrees. Makhlouf is silent on "displaying a graph"; a "display comprising effective utilization versus resource utilization"; "change in throughput divided by change in resource utilization" or "display comprising effective utilization versus resource utilization wherein effective utilization derived in the calculating step comprises change in throughput divided by change in resource utilization". The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 64 is allowable, which allowance is respectfully requested.

In paragraph 11, the Examiner says that as to claim 65, neither Gulich or Makhlouf teaches "the user agent displaying at a terminal a mark, the mark indicating the utilization at which the effective utilization is half of its maximum" but it would have been obvious. The applicant disagrees. The applicant respectfully requests the examiner provide citation of prior art for "marking effective utilization". The applicant submits claim 65 is allowable, which allowance is respectfully requested.

In paragraph 10, the Examiner says that as to claim 65, Makhlouf teaches the user agent using the resource control parameter to adjust resources allocated to the first partition. "The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 65 is allowable, which allowance is respectfully requested.

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In paragraph 12, the Examiner says that as to claim 66, Makhlouf teaches the using step is performed by a workload manager." The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 66 is allowable, which allowance is respectfully requested.

In paragraph 13, the Examiner says that as to claim 67, Makhlouf teaches wherein the workload manager is in a third partition." The Applicant disagrees. Makhlouf does not teach "workload manager is in a third partition" as shown in the claim. The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 67 is allowable, which allowance is respectfully requested.

In paragraph 16, the Examiner says that as to claim 70, Makhlouf teaches "providing the throughput information and the resource utilization information for the calculating step using a single operation memory to memory transfer function." The Applicant disagrees. Makhlouf does not teach "providing the throughput information and the resource utilization information" for a calculating step as shown in the claim. The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 70 is allowable, which allowance is respectfully requested.

In paragraph 17, the Examiner says that as to claim 71, Makhlouf teaches wherein the resources allocated to the first partition are adjusted by modifying resources allocated to the first partition." The Applicant disagrees. Makhlouf does not teach "modifying resources allocated to the first partition" as shown

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in the claim. The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 71 is allowable, which allowance is respectfully requested.

In paragraph 22, the Examiner says that as to claim 77, Makhoulf teaches "wherein the throughput information comprises an inverse throughput." The Applicant disagrees. Makhoulf does not teach "inverse throughput" as shown in the claim. The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 77 is allowable, which allowance is respectfully requested.

In paragraph 30 of the office action, the Examiner rejects Claims 63, 82 and 101 under 35 U.S.C. 103(a) as being unpatentable over Gulick (US 6,314,501) in view of Makhoulf (US 6,789,054) in further view of Chang (US 20020016952 A1).

In paragraph 31, the Examiner says that as to claim 63, Makhoulf and Gulick fail to teach "the user agent displaying at a terminal, the resource control parameter comprising curve fitted throughput information as a function of resource utilization, wherein the curve fitted throughput information is derived from the throughput information obtained. However, Chang teaches throughput with resource utilization and curve fitting to achieve estimation and prediction ([0295] and [0541]). It would have been obvious to combine Chang with Gulick and Makhoulf because this would allow for estimation on performance".

The Examiner has failed to show any motivation within the cited art to combine Chang with Gulick and Makhoulf.

According to *Karsten Mfg Corp. V. Cleveland Gulf Co.*, 242 F.3d 1376, 1385, 58 U.S.P.Q.2d 1286, 1293 (Fed. Cir. 2001), "In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or

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teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention:."

Also in *re C.R. Bard, Inc. V. M3 Sys., Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998).

Furthermore, Gulich is directed to a shared memory computer system while Makhoulf is directed to an Object Oriented computer simulation system and Chang is directed to circuit design which is non-analogous art. The applicant disagrees.

In *re Clay*, 966 F.2d 656, 658-59, 23 U.S.P.Q.2d 1058, 1060-61 (Fed. Cir. 1992) which requires "either 1. The art is from the same field as the invention or 2. The reference is reasonably pertinent to the problem solved by the invention".

According to *Smith v. Hayashi*, 209 U.S.P.Q. 754, 759 (Bd. Pat. App. & Int. 1980) The examiner must provide evidence to show that the prior art recognizes the equivalency.

Even if one were motivated to combine Chang with Gulich and Makhoulf, the result would teach away from the present invention. Such a combination would result in an Object Oriented program (Makhoulf) for modeling the Chang design method in a Gulich system. The applicant submits claim 63 is allowable, which allowance is respectfully requested.

Furthermore, while the Chang reference mentions "curve fitting", Chang does not show "curve fitted throughput information as a function of resource utilization". The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 63 is allowable, which allowance is respectfully requested.

In paragraph 33 of the office action, the Examiner rejects Claims 6376, 95, 114 and 116-121 under 35 U.S.C. 103(a) as being unpatentable over Gulick (US 6,314,501) in view of Makhoulf (US 6,789,054) in further view of Kutcher (US 6,301,615).

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In paragraph 34, the Examiner says that as to claim 76, Makhoulf and Gulich fail to teach "wherein the throughput information comprises network packet counts. However Kutcher discloses throughput information is obtained by relating network traffic to a processor utilization over a period of time and that the network traffic is obtained by counting network packets related to a partition (NETSTA AND VMSTATE, COL 5-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine Kutcher with Gulick and Makhoulf because this would allow for examination of the performance of the system throughput." The Applicant disagrees. The applicant requests that the Examiner specifically point out this function in the cited art. The applicant submits claim 76 is allowable, which allowance is respectfully requested. The Examiner has failed to show any motivation within the cited art to combine Kutcher with Gulich and Makhoulf.

According to *Karsten Mfg Corp. v. Cleveland Gulf Co.*, 242 F.3d 1376, 1385, 58 U.S.P.Q.2d 1286, 1293 (Fed. Cir. 2001), "In holding an invention obvious in view of a combination of references, there must be some suggestion, motivation, or teaching in the prior art that would have led a person of ordinary skill in the art to select the references and combine them in the way that would produce the claimed invention:."

Also in *re C.R. Bard, Inc. v. M3 Sys., Inc.*, 157 F.3d 1340, 1352, 48 U.S.P.Q.2d 1225, 1232 (Fed. Cir. 1998).

Even if one were motivated to combine Kutcher with Gulich and Makhoulf, the result would teach away from the present invention. Such a combination would result in an Object Oriented program (Makhoulf) for modeling the performance of computers in a network (Kutcher) in a Gulich system. The applicant submits claim 63 is allowable, which allowance is respectfully requested.

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Claims 78 and 97 are allowable as they comprise substantially the same limitations as allowable Claim 59, which allowance is respectfully requested.

Claims 60-61, 63-75, 76-77, 70-80, 82-94, 95-96, 98-99, 101-113, 114-121 are allowable as they depend on respective allowable Claims 59, 78 and 97, which allowance is respectfully requested.

It is respectfully submitted that the application is now in condition for allowance, which allowance is respectfully requested.

RESPECTFULLY SUBMITTED

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